

CSCI 110 ICE COMPUTING FOUNDATIONS EXAM

The knowledge and skills required to pass the exam include: an understanding of the basic principles and concepts of computer technology; understanding of the professional, ethical, legal, security and social issues and responsibilities germane to the computing discipline; an ability to develop a small scale programming project.

The topics covered include:

1. Binary values and number systems
2. Data representation
3. Gates and circuits
4. Computing component
5. Problem solving and algorithm design
6. Low-level programming languages
7. High-level programming languages
8. Abstract data types and algorithms
9. Operating systems
10. File systems and directories
11. Information systems

The exam consists of matching, short answer and essay questions. There are approximately 65 questions.

A study resource is the course text: *Computer Science Illuminated*, Dale & Lewis, 5th edition, Jones & Bartlett Publishers. ISBN: 978-0-7637-7646-6